

REMARKS

Claims 5-11 and 13-16 were pending in the present application. Claim 17 has been added, leaving Claims 5-11, 13-16 and 17 for further consideration in the present amendment.

Support for newly added Claim 17 can be found on page 12, line, 2 to page 16, line 10. No new matter has been added.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejection under 35 USC §102

Claims 5-11 and 13-16 stand rejected as being anticipated by the previously cited Thoms reference. Applicants respectfully traverse.

The Examiner states in paragraph [0007] of the outstanding Office Action, "Thoms discloses a guest-host system emissive system used in organic light emitting devices. Paragraph [0012] of the reference discloses that the host is a carbazole based compound having a structure,



wherein at least two R are carbazole or substituted carbazole (see paragraph 61). When there are three R's that are substituted on the 2-, 3-, and 6- position, there is no fold axis of symmetry. The reference reads on the instant claims when at least one substituted carbazole has different substitution from that of another substituted carbazole. For example the substitute carbazole at the 2-position can have alkyl substituents whereas the carbazole at the 6-position has no substituents.

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In order to support an anticipation rejection, a piece of prior art must clearly and unequivocally disclose the claimed composition or direct those skilled in the art to the composition without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference. *In re Arkley*, 59 CCPA 804, 455 F.2d 586, *Air Products & Chemicals, Inc. v. Chas. S. Tanner Co.* 219 USPQ 223, *Perricone v. Medicis Pharmaceutical Corp.*, 267 F.Supp.2d 229. Thoms fails to satisfy this burden. First, Thoms fails to disclose the compound represented in Applicants specification by formula 1 (i.e., the claimed compound). Thoms does not explicitly disclose Applicants' claimed compound, which has a specific structure that does not have an n-fold axis of symmetry, wherein at least one Z has a chemical structure different from that of another Z.

Secondly, Thoms discloses, in paragraph [0061] to which the Examiner also refers, almost an *infinite* number of carbazole based compounds, which may include the limited number of compounds as claimed by Applicants as well as other useful compounds not explicitly disclosed. Applicants have carefully and painstakingly researched numerous carbazole-based compounds to arrive at the claimed compounds that are suitable for organic electroluminescent properties. As provided in MPEP §2131.02, a generic formula will anticipate a claimed species covered by the formula when the species can be "at once envisaged" from the formula.

When the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g., a select various substituents from a list of alternatives given for placement at specific sites on a generic chemical; formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990),

There is no indication in Thoms of Applicants' claimed compounds in which there is no n-fold axis of symmetry. Applicants' claimed compounds are extremely limited in scope. In contrast, Thoms formula theoretically covers millions of possible permutations. One of ordinary skill in the art would not "at once envisage" Applicants claimed compounds. Moreover, as outlined by the Courts in *In re Petering*, one may look to the preferred embodiments to determine which compounds can be anticipated. *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962). All of

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the relevant preferred embodiments disclosed by Thoms have an n-fold axis of symmetry. Thus one of ordinary skill in the art would not "at once envisage" Applicants claimed compounds based on the disclosure provide in Thoms. For at least this reason, the rejection should be withdrawn.

Still further, it is submitted that Thoms does not disclose the specific structure of Applicants' claimed compounds, which do not have an n-fold axis of symmetry and wherein at least one Z has a chemical structure different from that of another Z. The Examiner states, "[w]hen there are three R's that are substituted on the 2-, 3-, and 6-position, there is no n-fold axis of symmetry. [...] The reference reads on the instant claims when at least one substituted carbazole has different substitution from that of another substituted carbazole. For example the substitute carbazole at the 2-position can have alkyl substituents whereas the carbazole at the 6-position has no substituents." Herein, the Examiner states that Thoms discloses the two limited structures, one is that three R groups are substituted on the 2-, 3-, 6-positions so as not to have an n-fold axis of symmetry and the other is that at least one substituted carbazole has different substituents from that of another substituted carbazole. It appears that the Examiner is improperly misrepresenting what is taught by the Thoms disclosure since there is no disclosure in Thoms of the two limited specific structures. Moreover, it is unclear how anyone, never mind one of ordinary skill in the art, would "at once envisage" these particular compounds from the generic formula and disclosure provided by Thoms as is necessary to support the anticipation rejection.

In conclusion, the claims are not anticipated since there is no explicit teaching that at least one Z has a chemical structure different from that of another Z. Moreover, one of skill in the art would not at once envisage Applicants claimed compounds that do not have an n-fold axis of symmetry from the disclosure provide by Thoms. Thoms provides an infinite number of carbazole-based compounds, wherein none of the preferred embodiments provide any direction that would permit those of skill in the art to at once envisage Applicants claimed compounds. In view of the foregoing, Thoms does not anticipate Claims 5-11 and 13-16, and the rejection should be withdrawn.

Regarding newly added Claim 17, this claim is patentably distinguished from Thoms for at least the same reasons discussed above. In addition, it is submitted that Thoms fails to disclose R


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groups other than that of carbazole or substituted carbazole. Accordingly, Claim 17 is patentably distinguished from Thoms and is allowable in its current form, which action is earnestly solicited.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested. The Examiner is requested to contact the undersigned should there be any additional questions or concerns.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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